

parts 10 are more or less in contact with each other and with the surface 14 of the pelt board 4, and an open position where the inner parts 10 are lying at a distance from each other.

100621 The outer parts 20 are placed on the respective brackets 38 by pivotally mounted arms 46, 48, these arms 46, 48 being displaceable via actuators 49 (Figs. 3-5) between a position in which the flange edges 33 are pressed against track 32 in the upper edge 28 of the inner parts 10, cf. Figs. 10 & 12, and a position in which the flange edges 33 lie at a distance from track 32.

100631 As further appears from Fig. 11, in the illustrated embodiment, the subtending sides 50 of the inner parts 10 extend in a concave manner, which is suitable for a pelt board 4 with broad sides which are arched/concave in relation to the center axis of the board in at least two directions. It is noted that the inner parts 10 and the outer parts 20 can be of other configurations, corresponding with pelt boards with cross-sectional shapes other than that shown here. For example, the subtending sides can be configured to accommodate boards with a rectangular cross-section.

100641 As further appears from Fig. 11, but more clearly in Fig. 7, the counter-hold flanges 27 stand upright from a planar part 52 which is oriented in a substantially transverse manner in relation to the extent of the counter-hold flanges. This offers the advantage that the lower end 24 of the pelt will be retained on the plane part 52 during the introduction of the counter-hold flanges 27 between the surface/outer side 14 of the pelt board and the leather side 16 of the pelt.

100651 In Figs. 9-11, the gripping elements 12 are shown in the closed position, so that that the edges 35 are lying in the tracks 32 in the counter-hold flange 27. Namely in Fig. 12, which is a sectional view of the gripping elements 12, it is seen how the shape of the tracks 32 in the counter-hold flange 27 and the edges 35 of the pressure flanges 33 on the outer parts 20 match one another, i.e., with the gripping elements in the closed position, where the lower end 24 of a pelt is clamped between the track 32 and the edge 35 of the pressure flange, there is formed a transversely-directed edge over which the pelt is fastened by the gripping elements, which results in a very effective fastening during the stretching of the pelt on the pelt board 4.

100661 Moreover, the inner parts 10 and the outer parts 20 are configured in such a manner that, in the closed position of the gripping elements, they allow a fixing bag to be led

down over a pelt stretched on the pelt board, which is achieved by the combination of the pressure flanges 33 and the tracks 32 in the upper edge of the counter-hold flange 27 of the inner parts.

100671 Thus, with the invention, there is provided a method and a machine for the mechanical, non-destructive stretching and fastening of pelts, by the drawing-on of a fixing bag to a level lying below the lower edge of the pelt in the stretched condition, the result being that there is no need for a further fastening of the pelt on the pelt board, whereby the use of staples which penetrate the pelt and the pelt board is rendered superfluous. Moreover, with the configuration of the machine 6, and namely its gripping elements 12, the shape of which corresponds to the geometry of the distension element, including that the gripping elements 12 engage the lower end 24 of the pelt along practically the whole of its periphery, the possibility is achieved of being able to stretch the pelts to a hitherto unknown extent, without the pelt being damaged in the area of engagement of the gripping elements, the reason being that the tractive forces in the holding/engagement area for the gripping elements 12 are distributed along the whole periphery of the pelt during the stretching of the pelt 2, which is effected by a relative displacement of the pelt board 4 and the gripping elements 12, typically by effecting a displacement of the holding means 8 for the foot 24 of the pelt board placed on U-shaped bracket plate 100 in the direction of the guide rail 102.

100681 As already mentioned, the stretching of the pelt can be further increased by activating a vibrator unit 60 during the above-described stretching of the pelt, which naturally places further demands regarding the distribution of the tractive forces in the area where the gripping elements 12 engage the lower end 18 (the tail end) of the pelt which, with the gripping elements 12 according to the invention, these demands are fulfilled.

100691 Therefore, with the invention, there is achieved an almost revolutionary development of the stretching and fastening procedure, which is expected to be introduced as standard within the production of pelts, and which will change the competitive conditions on the market to a considerable degree.

100701 As already mentioned, the inventor has recognized that the gripping elements for the stretching machine for the execution of the method according to the invention can be of configurations other than that disclosed in the present description, but this does not change the inventive aspect, which comprises providing a method where a pelt, during the stretching

procedure, is engaged by gripping elements, practically speaking, along the whole of the lower edge of the pelt, by configuring the gripping elements with a cross-section which is corresponds to that of a then-current pelt board.

What is claimed is:

1. Method for non-destructive stretching and fastening of a pelt (2) on a pelt board (4), for which use is made of a stretching machine (6) of the kind comprising holding means (8) for engaging the lower end (24) of a relevant pelt board (4), and gripping elements (12) for fastening of the lower end (24) of a pelt (2) drawn loosely over said pelt board during the stretching of said pelt (2) on the pelt board (4), where the pelt board (4) is placed in holding means (8) and where the gripping elements (12) comprising inner parts (10) and outer parts (20) are brought into engagement with the pelt (2) by the introduction of the inner parts (10) between the surface (14) of the pelt board and the leather side (16) of the pelt, and the outer parts (20) opposite the inner parts (10) are displaced towards the fur side (22) of the pelt for the fastening of the pelt (2) between the inner parts (10) and the outer parts (20), where the stretching takes place by effecting a displacement between the gripping elements (12) and the holding means (8) for the lower end of a relevant pelt board (4), and where an effective fastening of the pelt (2) in the stretched position on the pelt board is established by the drawing of a fixing bag (26) over the outside of the fur side (22) of the pelt, which at least over a part of the lower end releasing of the holding means (8) for the distension element (18) (the tail end) of the pelt is brought into tight contact with the fur side (22) of the pelt, followed by a releasing of the gripping elements (12) from the pelt (2) and a releasing of the holding means (8) for the pelt board (4), characterised in that the gripping elements (12) engage with and fasten the pelt (2) substantially along the whole periphery of the pelt.
2. Method according to claim 1, characterised in that during the relative displacement between the holding means (8) for the pelt board (4) and the gripping elements (12), a vibratory movement is imparted to said holding means (8) and/or the gripping elements (12), said movement oriented substantially in the longitudinal direction of the distension element/pelt/pelt board.
3. Stretching machine for use in the execution of the method disclosed in claim 1, and comprising holding means (8) for a distension element/pelt/pelt board (4), gripping elements (12) which can be activated for engagement/fastening of the lower end (24) of a pelt (2)

drawn loosely over distensionelement/pelt board (4), and means for effecting a relative displacement between the distensionelement/pelt board (4) and the gripping elements (12), and where the gripping elements (12) comprise at least two inner parts (10) which are led between the surface (14) of the distensionelement/pelt board (4) and the leather side (16) of the pelt from the lower end (24) of the board, and cooperating with the inner parts (10) at least two outer parts (20) with subtending sides which stand in connection with guiding and pressure means for displacement of the outer parts (2) between a closed position, where the outer parts are pressed into contact with the fur side (22) of the pelt for the fastening of the lower end of the pelt (2), and an open position where the pelt (2) is free, characterised in that the sides (25,29) of the inner parts (10) and the outer parts (20) respectively, said sides (25,29) facing towards the distensionelement/pelt board (4), are configured to match the shape of the distensionelement/pelt board (4), so that the gripping elements (12) engage with the lower end (18) of the pelt substantially along the whole of the outside periphery (14) of the distensionelement/pelt board (4).

4. Stretching machine (6) for execution of the method according to claim 2, characterised in that on the holding means (8) and/or the gripping elements (12) there is a vibrator unit (60) (which can be activated), the vibration amplitude of which is oriented substantially in the longitudinal direction of the distensionelement/pelt board.

5. Stretching machine according to claim 3 or 4, characterised in that the inner parts (10) comprise an upper counter-hold flange (27), the edge (28) of which on the side (30) facing away from the distensionelement/pelt board (4) comprises a track (32), and that the sides of the outer parts (20) facing towards the upper edge (28) comprise a pressure flange (33) which cooperates with the track (32) and has an edge (35) with a shape which corresponds to the shape of the track (32).

6. Stretching machine according to any of the claims 3-5, characterised in that the inner parts (10) of the gripping elements (12) consist of two open, similarly-shaped but laterally reversed half parts (34,36) which are displaceable towards each other, and which are housed on the respective brackets (38) which are disposed opposite each other via a pivot connection, where

by actuators (40) said brackets (38) aredisplaceable towards and away from each other between a closed position where the subtending sides (42,44) of the inner parts (10) are more less in contact with each other, and an open position where the inner parts (10) are lying at a distance from each other, and where the outer parts (20) are placed on pivotally mounted arms (46,48) for the respective brackets (38), said arms (46,48) being displaceable by actuators between a position where the flange edges (33) are pressed in against the tracks (32) in the upper edge (28) of the inner parts (10), and a position where said flange edges are lying at a distance from said tracks (32).^

7. Stretching machine according to any of the claims 3-6, characterised in that the subtending sides (50) of the inner parts (10) extend in a concave manner.

8. Stretching machine according to any of the claims 3-7, characterised in that the counterhold flanges (27) stand up from a plane part (52) which is oriented in a substantially transverse manner in relation to the extent of the counter-hold flanges.

Abstract

In connection with the non-destructive stretching and fastening of pelts (2) on distention elements/pelt boards (4), where the pelt is stretched and fastened in the stretched position during the drying process by means of a fixing bag, it has shown that the pelts give way (shrink) on each side of the tail root of the pelt, with the result that use is made of a number of staples for the fastening of these places on the stretched pelt. Since it is not at all desirable to use staples, a development of the ~~distension-elements/pelt boards~~ (4) has taken place, so that these have an arched extent around two transverse axes in relation to their longitudinal axes. Moreover, it has long been desirable to be able to stretch the pelts to a greater degree, which has not been possible with the use of the known stretching machines. This development has led to the development of a method and a stretching machine for the execution of the method, where the gripping elements are configured to correspond with the shape of the ~~distension-element/pelt~~pelt board, and where the pelt is engaged by the gripping elements along the whole of the lower periphery of the pelt, so that the counter-hold force in the pelt is distributed over the whole periphery of the pelt, whereby the pelt can be stretched to a greater degree without any damage to the pelt in the areas of engagement for the gripping elements.